

## ABSTRACT OF THE DISCLOSURE

A thermometer for determining body temperature at a first body site, such as the mouth or rectum, has an infrared sensor located in a probe for viewing and detecting heat radiated from a second body site such as the forehead. Ambient temperature is measured concurrently. The measured second site temperature is used as a reference base, and the sensed operating ambient temperature is used as an index so as to calculate a corresponding temperature of the first body site. A final temperature reading display is read from a lookup table containing three groups of data derived from a comprehensive clinical test done previously with a substantial number of measuring targets. The data groups include a second body site temperature database, an operating ambient temperature database, and a first body site temperature database.